

CALL FOR PAPERS WASPAA 2023

Mohonk Mountain House, New Paltz, NY

Oct. 22-25, 2023

<http://waspaa.com>

The 2023 IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA 2023) will be held at the Mohonk Mountain House in New Paltz, New York, and is supported by the Audio and Acoustic Signal Processing technical committee of the IEEE Signal Processing Society (SPS). The objective of the workshop is to provide an informal environment for the discussion of problems in audio, acoustics and signal processing techniques leading to novel solutions. Technical sessions will be scheduled throughout the day. Afternoons will be left free for informal meetings among workshop participants. As part of a focus on diversity and inclusion, increased travel grant support will be awarded in partnership with the SPS and the IEEE Foundation Student and Young Professionals (SYP) Fund on the basis of SYP eligibility, diversity & inclusion eligibility, financial need, and authorship. Papers describing original research are solicited on, but not limited to, the topics of interest.

Submission of Papers

Prospective authors are invited to submit full-length papers, with up to four pages for technical content including figures and references, and one optional 5th page of references only. The review process for this year will be double-blind.

Important Dates

- Paper deadline: April 28, 2023
- Abstract deadline: April 21, 2023
- Notification of acceptance: July 12, 2023
- Camera-ready paper: July 26, 2023
- Early registration: August 22, 2023

KEYNOTE SPEAKERS

- **Emily Provost** *University of Michigan*
- **Kristen Grauman** *University of Texas & Facebook AI Research*
- **Jesse Engel** *Google Brain (Magenta)*

ORGANIZING COMMITTEE

GENERAL CHAIRS

- **Minje Kim** *Indiana University*
- **Nicholas J. Bryan** *Adobe Research*

AWARDS CHAIR

- **Tuomas Virtanen** *Tampere University*

INDUSTRY LIAISON CHAIRS

- **Tarun Pruthi** *Meta*
- **Daniele Giacobello** *Apple*

LOCAL ARRANGEMENTS CHAIR

- **Michael S. Brandstein** *MIT*

FINANCE CHAIR

- **Mark Cartwright** *New Jersey Institute of Technology*

TECHNICAL PROGRAM CHAIRS

- **Juan P. Bello** *New York University*
- **Mounya Elhilali** *Johns Hopkins University*

PUBLICATIONS CHAIR

- **Rachel Bittner** *Spotify*

DIVERSITY AND INCLUSION CHAIRS

- **Magdalena Fuentes** *New York University*
- **Juhan Nam** *KAIST*

DEMONSTRATIONS CHAIR

- **Kazuuyoshi Yoshii** *Kyoto University*

TOPICS OF INTEREST

ACOUSTIC SIGNAL PROCESSING

- Source separation: single- and multi-microphone techniques
- Signal enhancement: dereverberation, noise reduction, echo reduction
- Microphone and loudspeaker array processing
- Acoustic sensor networks: distributed algorithms, synchronization
- Room acoustics: analysis, modeling and simulation
- Bioacoustics and medical acoustics

SYNTHESIS AND SIMULATION

- Generative models for audio
- Text to audio/speech generation
- Audio for VR/AR
- Audio effects: artificial reverberation, amplifier modeling
- Spatial audio reproduction

ACOUSTIC SCENES AND EVENTS

- Scene analysis and classification
- Event detection and classification
- Source localization and tracking
- Audio captioning
- Multi-modal sensing, analysis and retrieval

MUSIC SIGNAL PROCESSING

- Content-based music retrieval: fingerprinting, matching, cover song retrieval
- Musical signal analysis: segmentation, classification, transcription
- Music signal synthesis: waveforms, instrument models, singing, mixing
- Music separation: direct-ambient decomposition, vocal and instruments

AUDIO SECURITY AND PRIVACY

- Privacy-preserving audio processing
- audio analysis for forensics
- audio watermarking
- Content authenticity and deep fake detection
- Speaker (de-)identification

AUDIO AND SPEECH CODING

- Waveform and parametric coding
- Spatial audio coding
- Sparse representations
- Low-delay audio and speech coding
- Digital rights

HEARING AND PERCEPTION

- Hearing aids
- Computational auditory scene analysis
- Auditory perception and spatial hearing
- Speech and audio quality assessment
- Speech intelligibility measures and prediction